



Implementing literature into practice: OT's role in the emergency department

Whitney Ennis, OTD, OTR/L, BCPR

Contributing authors:

Madison Owens & Logan Hall

OTD students, E&H Class of 2024

OBJECTIVES

1

Define OT's role in acute care with a compare/contrast model to OT's role in the emergency department

2

Highlight evidence-based practice from around the world supporting and explaining OT's role in the emergency department

3

Discuss current practices and potential growth of the role of OT in the emergency department



OT's role in acute care ^{1, 8}



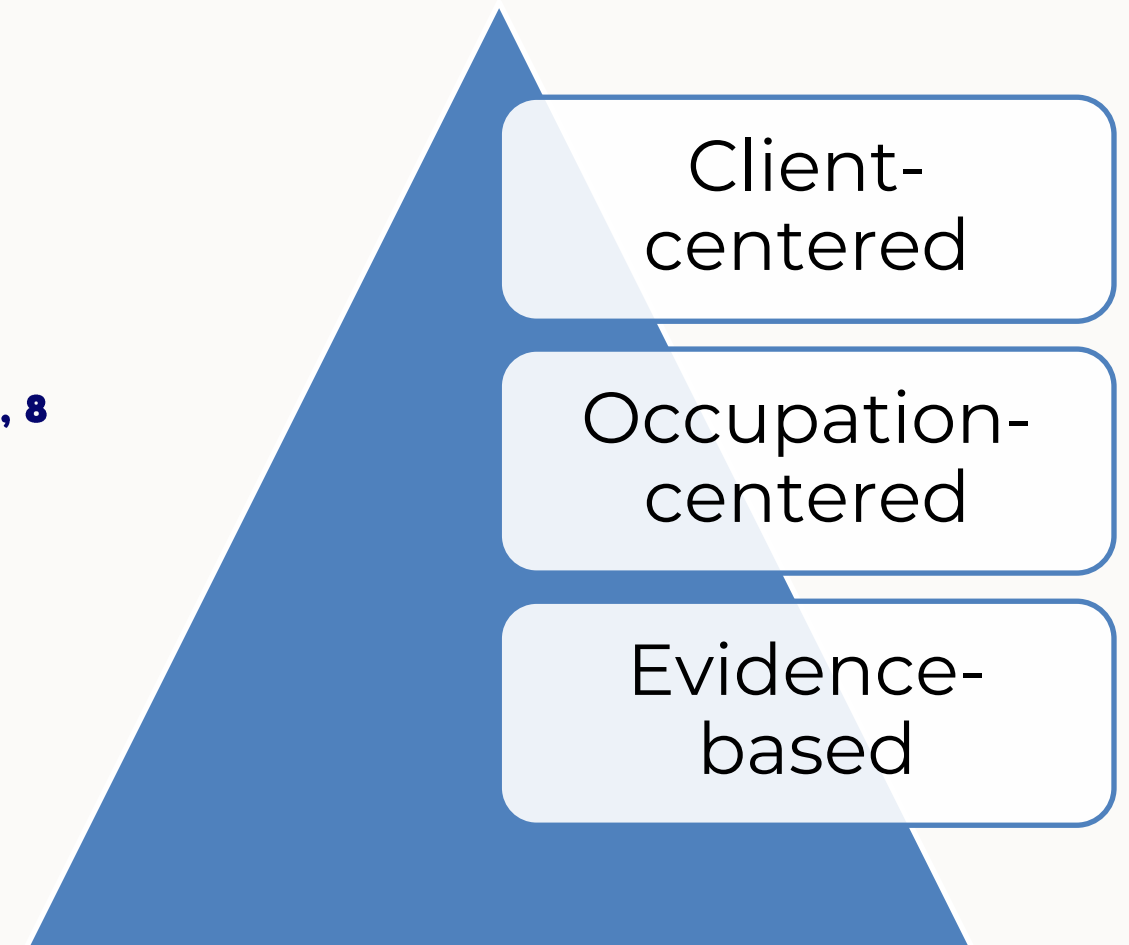
ENGAGEMENT IN OCCUPATIONS

- ADLs, IADLs
- Health management, rest & sleep
- Work, leisure



OT PROCESS

- Evaluation
- Intervention
- Discharge planning



Defining OT's role in the emergency department (ED)

4,12,14

01

Enhance discharge planning

02

Promote patient safety

03

Reduce hospital readmissions



Challenges in ED vs acute care

Similar but more pronounced ¹⁴

Space

- Smaller rooms
- Less walls
- Beds in hallways
- More equipment
- Less privacy
- Shared bathroom

Noise

- Many more people in a smaller space
- More monitors beeping

Lighting

- Limited natural light/no windows
- Extremes

Equipment

- Stretchers are higher than hospital beds
- Limited adaptive equipment (AE) and durable medical equipment (DME)

Distractions

- Overstimulating
- Multiple providers, patients, staff in small space

Social

- Family may not be available
- Visitor restrictions
- Housing concerns
- Support



**While our roles are essentially the same and the challenges are similar,
our mindset is in the ED must be shifted.**

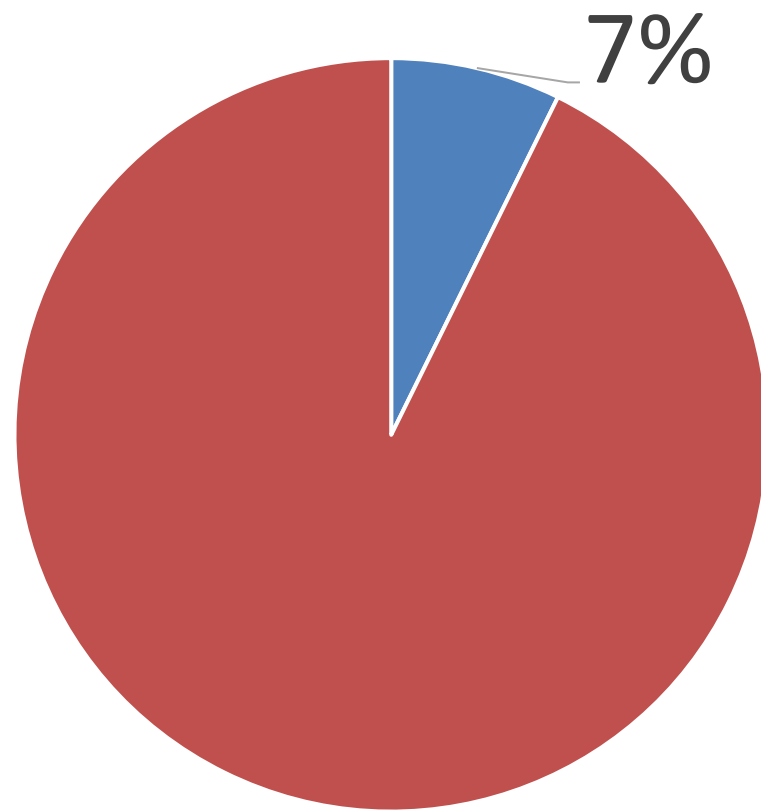
**We aren't thinking about a plan of care or goals or interventions. We need
to be thinking, from a functional perspective,**

*** Can I and/or how can I keep this patient out of the ED and out of the
hospital?***

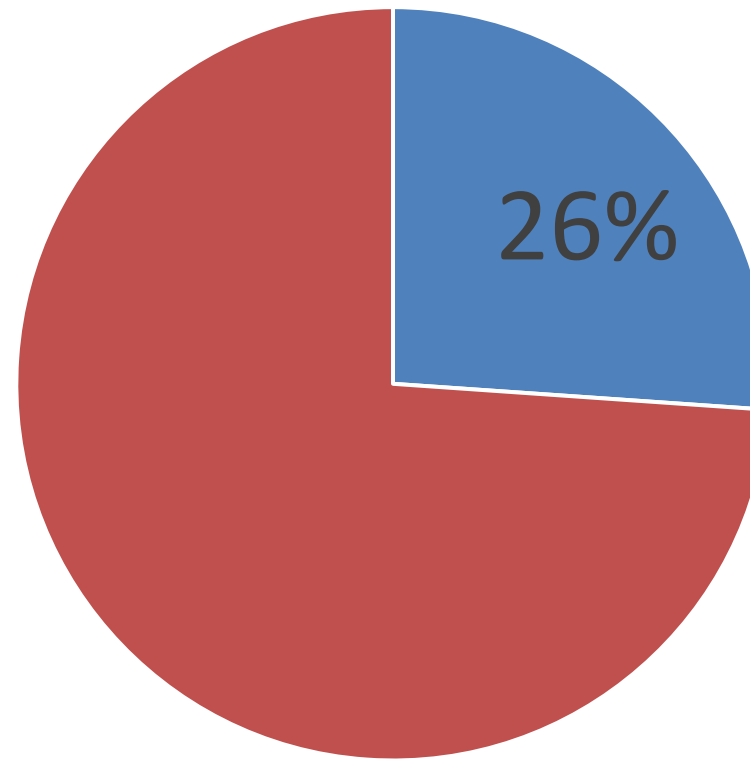


What's happening now? ^{4,11,14}

**ADL
assessments**



**Cognitive
assessments**



- Nearly 25% of patients with common diagnoses are being readmitted within 30 days of discharge from the ED
 - 75% of readmissions are considered preventable, costing \$12 billion
- No increase in bed capacity; only increase in hospital admissions = unsustainable

Evidence to support OT in the ED

4, 7, 10,11, 12, 14

Hospital readmissions

Spending on OT services has a statistically significant association with lower readmission rates and better patient outcomes

Hospital admissions from the ED

- International studies have shown that patient admissions to the hospital are reduced with use of OT services
- OT alone as well as on a multidisciplinary team reduced rate of hospital admission



International Evidence-Based Practice

Sweden ¹³

- Qualitative study
- 14 OT's from three different hospitals (average work experience: 21 years; average work experience at facility: 12 years)
- Themes & subthemes from semi-structure interviews:
 - Strategies to enable OT practice in emergency care
 - Being flexible
 - Reprioritizing multiple times a day
 - Using standardized assessments to address ADLs
 - Thorough occupational profile and functional performance level → the whole picture
 - Collaboration with other team members
 - I am an OT professional
 - Advocating for the profession and its value
 - Educating other healthcare providers on the role of OT in this setting
 - Developing practice
 - Continuing education
 - Improving their own



Netherlands ⁹

- Falls #8 cause of death
- One in five return to ED within 30 days post fall, mostly with new fall
- Poor participation in current fall prevention programs
- Non-randomized controlled pilot trial for a falls prevention program
- Older adults (> 70 years old), fall from standing height or less, no hospital admission (only ED visit), independent living, and able to give consent
- Intervention group: usual care plus falls assessment, home care, followed by community falls prevention program
- 15 in intervention group, 19 in control group
- After 3 months, 26% (9 individuals) with at least one recurrent fall (20% in intervention group, 32% in control group)
- Biggest achievement: 90% participation in all aspects of project

International Evidence-Based Practice

Scotland & UK¹⁰

- UK government gave a 4-hour target from ED admission to discharge to improve efficiency
- OT's play a key role in facilitating optimal functional outcomes while reducing length of hospital admission and saving money
- Semi-structured interviews about the experience of working as an OT in the ED
- Participants had 8-20 years of experience

Themes:

1. Reductionistic and automated; loss of a sense of individuality for patient
2. Different culture in ED as compared to admitted hospital floors. Felt valued and sense of belonging with recognition from ED staff



Australia⁷

- Survey of OT's in ED (30 respondents) asking logistical questions like years of experience, primary role, diagnoses seen, evaluations, etc.
- Defined role as "functional assessment of patients admitted to ED to determine suitability for discharge or admission to relevant inpatient hospital wards."

Results

- Common resources: equipment, education, community information, assessments, splinting, home visits
- Average number of patients seen per day: 6.5
- Common diagnostic group and diagnoses: geriatric, fall, medical condition and/or exacerbation
- Evaluations: initial interviews, functional assessments, Mini Mental State Exam
- Interventions: equipment prescription, education, referrals to community services, home visits/home modifications
- **No formal evaluation for the effectiveness of OT interventions in the ED**

Transprofessional Care ¹¹

- Problem: Limited access to primary care → using the ED to access care → access block
 - National Emergency Access Target (NEAT) → 90% of patients to be discharged must be out within 4 hours of arrival
- Transprofessional teams: bringing together multiple disciplines into cohesive unit to work towards common goal
 - Complete training in each other's professions
 - Role blurring
 - Avoid the delay associated with waiting for multiple specialized services
 - Shown to improve ED efficiency
- Allows single team member to assess and manage multitude of patient presentations, expediting flow through ED
 - Key to success was team collaboration and willingness to share knowledge, skills, and expertise



Transprofessional Care ¹¹

Competencies

Physiotherapists

- Slings and splints
- Gait aids
- Soft-tissue injuries
- Fractures
- Mobility assessments
- Follow-up physio

Occupational therapy

- Aids and equipment
- Wheelchair prescriptions
- Cognition assessment
- Functional assessment
- Patient education

Nurse

- Wound care
- Catheter care
- Medication management

Social work

- Psychosocial assessment
- Homelessness
- Child abuse
- Family violence
- Grief and bereavement
- Elder abuse/aged care

Patient assessed
and prioritized by
triage nurse

Assessed and
managed by nursing
and medical team

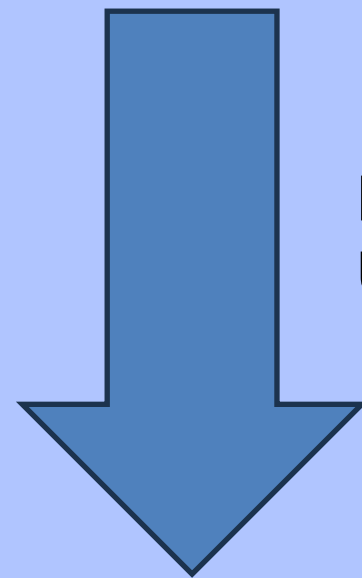
Referred to
transprofessional
team

Assessed and
managed by
transprofessional
team

Disposition

Transprofessional Team Success!

- Sample size of 150 patients in transprofessional group and 50 in reference group
- Mean wait time: 62 minutes (no significant difference between groups)
- Rate of hospital admission was significantly lower in the transprofessional group compared to reference group



Hospitalization rates and hospital admissions
Unscheduled re-presentation rates



What's going on in the USA?

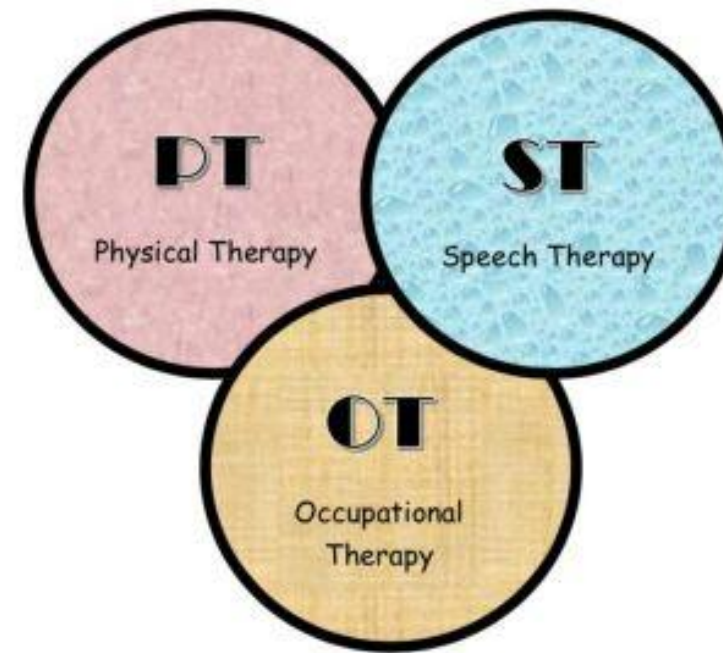
4, 7, 10, 11, 12, 14



- AOTA has acknowledged OT has a role in the ED but it is understudied and there's a lot of room for growth with knowledge
- **Studies have shown that OT's reduce readmission rates and establish safer discharges**
- Need to educate hospital providers to understand the value we bring and how we can contribute to a safe discharge as well as better care
- Need to standardize our assessment and referral process for best practice

Stateside Evidence-Based Practice 4, 12, 14

- By excluding balance, cognition, ADLs from evaluation of older adults in the ED, we are missing an opportunity to prevent additional injuries, decrease rate of ED visits and improve patient safety and satisfaction
- PT/OT/SLP in ED are linked to:
 - Decreased wait times
 - Decreased ED length of stay
 - Improved workflow
- Barriers:
 - Administration buy-in
 - Financial support
 - Physical space limitations
 - Staffing availability
- Fall prevention – vital to mitigate recurrent, future falls; decrease hospital admissions



Stateside Evidence-Based Practice 4, 12

- Study about lived experiences of OT's practicing in the ED
 - 10 participants across 5 hospitals in PA
 - Estimate 48% of patients involved in this study avoided hospitalization as a direct result of OT or social work intervention
- Four central themes:
 - Discharge recommendations that ensure patient safety
 - The next step
 - Lack of education of the ED staff and inappropriate or premature referrals
 - Factors affecting the future of OT in the ED



Backyard Evidence-Based Practice ²

- Physicians and researchers with Yale School of Medicine
- Goal: To measure the effect of a coordinated frailty assessment and home safety intervention by research paramedics with follow-up visits by community-based home health nurses on subsequent, all-cause ED utilization (LT goal: improve safety and ability to live independently)
- Participants: (1) Individuals seen in the ED post fall, (2) individuals who self-enrolled; identifying as a high fall risk, (3) identified by EMS as “lift assist” following non-injury fall
- Home safety checklist, med list, frailty assessment
- Intervention resulted in (for individuals seen in ED post fall): 38% relative reduction in subsequent ED visits within 30 days, 25% relative reduction at 90 days
- **Recent research has shown that emergency physicians fail to identify risk factors for falls in the ED**



What's going on in Connecticut?

5

Nearly 850,000 ED visits

16% having 2 ED visits

2,700 individuals visiting over 10 times each

ED super-users = 15% of avoidable visits

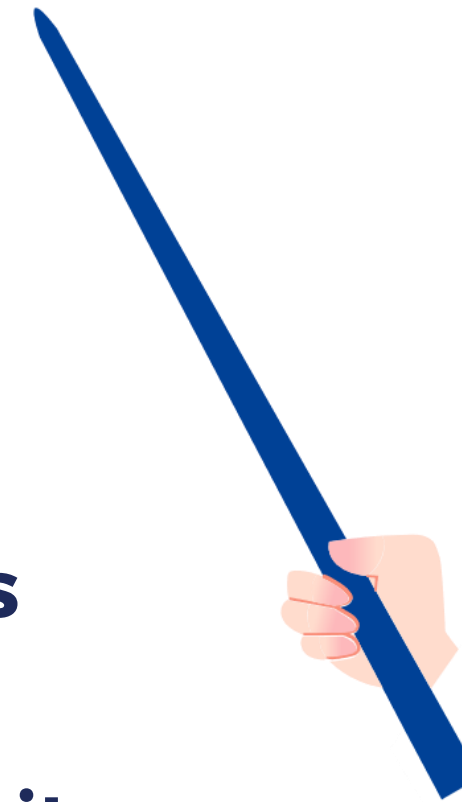
2021

Connecticut's Office of Health Strategy

Some ED visits are avoidable as some of these could be addressed by primary or community-based care

Top 4 conditions identified as avoidable ED visits:

- UTI
- Chest pain
- Low back pain
- Dizziness



CMS Hospital Readmissions Reduction Program (HRRP) ^{3,6}

CT's Readmission Penalties

\$7.1 million in 2015

\$11 million in 2017

\$10 million in 2018

Conditions

1. Acute myocardial infarction (MI)
2. Heart failure (HF)
3. Pneumonia (PNA)
4. Chronic obstructive pulmonary disease (COPD)
5. Joint replacement (THA/TKA)
6. Coronary artery bypass graft (CABG)



References

1. American Occupational Therapy Association. (2020). Occupational therapy practice framework: Domain and process (4th ed). *The American Journal of Occupational Therapy*, 74(2), pp. 1-87.
2. Bogucki, S., Siddiqui, G., Carter, R., McGovern, J., Dziura, J., Gan, G., Li, F., Stover, G., Cone, D.C., Brokowski, C., & Joseph, D. (2023). Effect of a home health and safety intervention on emergency department use in the frail elderly: A prospective observational study. *Western Journal of Emergency Medicine*, 24(3), 522-531.
3. Centers for Medicare and Medicaid Services. (2023). Hospital Readmissions Reduction Program (HRRP). <https://www.cms.gov/medicare/quality/value-based-programs/hospital-readmissions>.
4. Chown, G., Soley, T., Moczydlowski, S., Chimento, C., & Smoyer, A. (2016). A phenomenological study on the perception of occupational therapists practicing in the emergency department. *The Open Journal of Occupational Therapy*, 4(1), Article 3.
5. Connecticut Office of Health Strategy. (2022). Emergency room utilization in Connecticut: FFY 2016-2021. <https://portal.ct.gov/OHS>.
6. Connecticut Office of Health Strategy. (2020). Hospital readmissions penalties in Connecticut: FFY 2015-2018. <https://portal.ct.gov/OHS>.
7. Cusick, A., Johnson, L., & Bissett, M. (2009). Occupational therapy in emergency departments: Australian practice. *Journal of Evaluation in Clinical Practice*, 257-265.
8. Hanson, D.J., & Stube, J.E. (2017). Occupational therapy in the acute care context: An evolving role. In H. Smith-Gabai & S.E. Holm (Eds.), *Occupational Therapy in Acute Care* (2nd ed., pp. 3-22). AOTA Press.
9. Hepkema, B.W., Koster, L., Geleijn, E., Van Den Ende, E., Tahir, L., Oste, J., Prins, B., Van Der Velde, N., Van Hout, H., Nanayakkara, P.W.B. (2022). Feasibility of a new multifactorial fall prevention assessment and personalized intervention among older people recently discharged from the emergency department. *PLoS ONE*, 17(6), e0268682.
10. James, K., Jones, D., Kempenaar, L., Preston, J., & Kerr, S. (2018). Occupational therapists in emergency departments: A qualitative study. *British Journal of Occupational Therapy*, 81(3), 154-161.
11. Morphet, J., Griffiths, D.L., Crawford, K., Williams, A., Jones, T., Berry, B., & Innes, K. (2016). Using transprofessional care in the emergency department to reduce patient admissions: A retrospective audit of medical histories. *Journal of Interprofessional Care*, 30(2), 226-231.
12. Pontius, E.A., & Anderson, R.S. (2021). Physical therapy, occupational therapy, and speech language pathology in the emergency department: Specialty consult services to enhance the care of older adults. *Emergency Medicine Clinics of North America*, 39, 419-427.
13. Spang, L., & Holmqvist, K. (2015). Occupational therapy practice in emergency care: Occupational therapists' perspectives. *Scandinavian Journal of Occupational Therapy*, 22, 345-354.
14. Wegner, K. (2023). Occupational therapy's role in the emergency department. *American Occupational Therapy Association's Rehabilitation & Disability Special Interest Section*. [https://www.aota.org/publications/sis-quarterly/rehabilitation-disability-sis/rdsis-5-23#:~:text=The%20emergency%20department%20\(ED\)%20is,safety%2C%20and%20reduce%20hospital%20readmissions](https://www.aota.org/publications/sis-quarterly/rehabilitation-disability-sis/rdsis-5-23#:~:text=The%20emergency%20department%20(ED)%20is,safety%2C%20and%20reduce%20hospital%20readmissions).